

# LITTLE COLORADO RIVER BASIN

## 09397300 LITTLE COLORADO RIVER NEAR JOSEPH CITY, AZ

**LOCATION.**--Lat 34°54'04", long 110°15'17", in NE1/4SE1/4 sec. 6, T.17 N., R.20 E., Navajo County, Hydrologic Unit 15020008, on left bank just upstream from diversion dam, 5.4 mi west of Holbrook, 5.7 mi southeast of Joseph City, and 8.5 mi downstream from Puerco River.

**DRAINAGE AREA.**--12,384 mi<sup>2</sup>, of which 347 mi<sup>2</sup> are noncontributing.

**PERIOD OF RECORD.**--July 1973 to current year (daily discharge only for those days on which instantaneous discharge exceeds 500 ft<sup>3</sup>/s).

**REVISED RECORDS.**--WDR AZ--88--1: Drainage area.

**GAGE.**--Water-stage recorder, crest-stage gage, and concrete diversion dam. Datum of gage is 5,031.10 ft above sea level (U.S. Army Corps of Engineers benchmark). From Oct. 1, 1990, to Mar. 19, 1993, on right bank at same datum.

**REMARKS.**--Records fair except for estimated daily discharges, which are poor. Published record includes only those days when instantaneous discharge over the crest of the dam exceeds 500 ft<sup>3</sup>/s. Diversions above station for irrigation of about 23,000 acres, diversions at dam on right bank of most low flows for irrigation of about 1,500 acres in vicinity of Joseph City. Some regulation by reservoirs; combined capacity of principal reservoirs, about 91,400 acre-ft.

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge, 25,400 ft<sup>3</sup>/s Dec. 19, 1978, gage height, 7.64 ft, from rating curve extended above 7,400 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 6.82 ft.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--A discharge of 60,000 ft<sup>3</sup>/s was determined for peak of Sept. 19, 1923, at Holbrook (see prior records for sta 09397000, Little Colorado River at Holbrook, for this peak and other peaks 1905--6, 1949--73).

**EXTREMES FOR CURRENT YEAR.**--Peak discharges greater than base discharge of 5,000 ft<sup>3</sup>/s and (or) maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Sept. 20.....	unknown	*5,090	*5.30a

a-from floodmark

### DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	295	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	63	---	---
15	---	---	---	---	---	---	---	---	---	1400	450	---
16	---	---	---	---	---	---	---	---	---	e221	e808	---
17	---	---	---	---	---	---	---	---	---	---	e644	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	e900
20	---	---	---	---	---	---	---	---	---	---	---	e669
21	---	---	---	---	---	---	---	---	---	---	e600	---
22	---	---	---	---	---	---	---	---	---	---	e269	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	221	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	e1420
30	---	---	---	---	---	---	---	---	---	---	---	e419
31	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

e Estimated

## WATER-QUALITY RECORDS

**PERIOD OF RECORD.**--October 1979 to current year.

**INSTRUMENTATION.**-- Automatic pumping sampler since October 1981.

**REMARKS.**-- Suspended-sediment discharge computed from sample data and by interpretation of a sample based suspended-sediment and streamflow discharge curve. Record for days when instantaneous discharge over the crest of the dam exceeds 500 ft<sup>3</sup>/s.

SUSPENDED SEDIMENT DISCHARGE, TONS PER DAY, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	e216000	---
7	---	---	---	---	---	---	---	---	---	---	e37500	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	e228000
10	---	---	---	---	---	---	---	---	---	---	---	76900
11	---	---	---	---	---	---	---	---	---	---	---	1180000
12	---	---	---	---	---	---	---	---	---	---	---	601000
13	---	---	---	---	---	---	---	---	---	---	---	e180000
14	---	---	---	---	---	---	---	---	---	---	---	143000
15	---	---	---	---	---	---	---	---	---	---	---	103000
16	---	---	---	---	---	---	---	---	---	34600	---	e12300
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	9370
20	---	---	---	---	---	---	---	---	---	---	24500	26500
21	---	---	---	---	---	---	---	---	---	---	37900	20700
22	---	---	---	---	---	---	---	---	---	---	---	32000
23	---	---	---	---	---	---	---	---	---	---	---	5130
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	e165000	---	---
28	---	---	---	---	---	---	---	---	---	e92100	---	---
29	---	---	---	---	---	---	---	---	---	e23500	---	---
30	---	---	---	---	---	---	---	---	---	---	40300	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---

e Estimated

SUSPENDED SEDIMENT DISCHARGE, TONS PER DAY, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	16900	---	---	---	---	---	---	---	e1550	---
4	---	---	---	---	---	---	---	---	---	---	108000	11600
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	33500	---	---	---	---	---	---	---	---
7	---	---	e128000	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	410000
12	---	---	---	---	---	---	---	---	---	---	6970	e39600
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	197000	---
16	---	---	---	---	---	---	---	---	---	---	38000	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	14300	---
26	---	---	---	---	---	---	---	---	---	---	31900	---
27	---	---	---	---	---	---	---	---	---	---	62200	---
28	---	---	---	---	---	---	---	---	---	---	e6330	---
29	---	---	---	---	---	---	---	---	---	e65900	147000	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---

e Estimated

SUSPENDED SEDIMENT DISCHARGE, TONS PER DAY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

e Estimated

[illegible]

## WATER-QUALITY RECORDS

SUSPENDED SEDIMENT CONCENTRATION, MILLIGRAMS PER LITER, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	11500	---	---	---	---	---	---	---	6150	---
4	---	---	---	---	---	---	---	---	---	---	91300	15400
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	10500	---	---	---	---	---	---	---	---
7	---	---	---	82000	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	91600
12	---	---	---	---	---	---	---	---	---	---	14800	52900
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	888000	---
16	---	---	---	---	---	---	---	---	---	---	48700	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	10300	---
26	---	---	---	---	---	---	---	---	---	---	20000	---
27	---	---	---	---	---	---	---	---	---	---	31200	---
28	---	---	---	---	---	---	---	---	---	---	10000	---
29	---	---	---	---	---	---	---	---	---	38400	75700	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	-	-	---	---	---	---	---	-	-	-
MIN	---	---	-	-	---	---	---	---	---	-	-	-

SUSPENDED SEDIMENT CONCENTRATION, MILLIGRAMS PER LITER, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	5420	---	---
15	---	---	---	---	---	---	---	---	---	112000	62100	---
16	---	---	---	---	---	---	---	---	---	e49300	e126000	---
17	---	---	---	---	---	---	---	---	---	---	e106000	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	e71000
20	---	---	---	---	---	---	---	---	---	---	---	e100000
21	---	---	---	---	---	---	---	---	---	---	e108000	---
22	---	---	---	---	---	---	---	---	---	---	e89900	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	46000	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	e78100
30	---	---	---	---	---	---	---	---	---	---	---	e74600
31	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	-	-	-
MIN	---	---	---	---	---	---	---	---	---	-	-	-

e Estimated